In the Claims

Listing of claims

1. (Original) A compound of formula (I):

$$R^3$$
 R^4
 R^4
 R^4
 R^4

or a salt or solvate thereof, wherein:

R¹ is -¹¹CH₂R⁵ or [¹⁸F]-C₁₋₄ fluoroalkyl wherein R⁵ is hydrogen or C₁₋₄ alkyl;

R² is hydrogen or C₁₋₄ alkyl;

R³ is halo; and

 R^4 is halo, C_{1-4} alkylthio, or C_{1-4} alkyl.

2. (Original) A compound according to claim 1 of formula (Ia):

$$\mathbb{R}^3$$
 \mathbb{N}
 \mathbb{N}
 \mathbb{R}^4
 \mathbb{R}^4
 \mathbb{R}^2
(la)

or a salt or solvate thereof, wherein R^1 , R^2 , R^3 , and R^4 are as defined in claim 1.

3. (Currently amended) A compound according to claim 1 or 2 of formula (Ib):

or a salt or solvate thereof, wherein:

 R^4 is C_{1-4} alkylthio;

 R^1 is either $-^{11}CH_3$, $-^{11}CH_2CH_3$, or $-^{11}CH_2CH_2CH_3$ or R^1 is $-CH_2^{18}F$, $-CH_2CH_2^{18}F$, or $-CH_2CH_2CH_2^{18}F$.

4. (Original) A compound of formula (Ic):

or a salt or solvate thereof, wherein:

 R^{1c} is C_{1-4} alkyl or C_{1-4} haloalkyl;

R^{2c} is hydrogen or C₁₋₄ alkyl;

R^{3c} is radioiodine (suitably ¹²³I, ¹²⁴I, ¹²⁵I, or ¹³¹I); and

 R^{4c} is halo, C_{1-4} alkylthio, or C_{1-4} alkyl.

5. (Currently amended) A compound according to any one of claims 1 to 3 claim 1, selected from:

(N-(2-chloro-5-(methylthio)phenyl)-N'-(3-methylthio)phenyl)-N'-[N-methyl-¹¹C]-methylguanidine; and (N-(2-chloro-5-(methylthio)phenyl)-N'-(3-methylthio)phenyl)-N'-[¹⁸F]-fluoromethylguanidine; or a salt or solvate thereof.

- 6. (Currently amended) A compound according to any one of claims 1 to 5 claim 1, for use in an *in vivo* diagnostic or imaging method such as PET.
- 7. (Currently amended) Use of a compound according to any one of claims 1 to 5 claim 1, in the manufacture of a radiopharmaceutical for the *in vivo* diagnosis or imaging of an NMDA-mediated disease.
- 8. (Currently amended) A method for the *in vivo* diagnosis or imaging of NMDA-mediated disease in a subject, preferably a human, comprising administration of a compound according to any one of claims 1 to 5 claim 1.